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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/748,992
Filing Date: December 29, 2003
Appellant(s): SIKORSKI, STEVEN MAURICE

Himanshu S. Amin (40,894)
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 21 February 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

US 2004/0201595 A1	Manchester	10-2004
US 6,707,581 B1	Browning	03-2004
US 6,937,281 B1	Ogawa	08-2005

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims **1**, **2**, **5**, **6**, **7**, and **16** are rejected under 35 U.S.C. 102(e) as being anticipated by Manchester (2004/0201595 A1).

In regards to claim **1**, **5**, **6**, **7**, and **16** –

Manchester discloses a self-orienting display that senses the characteristics of an object and automatically rotates and reformats a display image in accordance with those characteristics [0019]. Fig. 1 is an illustration of a self-orienting display (100) comprising a display device (12) (claims **1**, **16**: ***display component***), a display image (14), a sensor (16), and optional control buttons (18). The self-orienting display (12)

may be in the form of any appropriate display device capable of providing the display image (14), such as hand held devices (claim **1**: ***a mobile device comprising a display component***) and wireless devices (e.g., cellular devices including telephones, PDAs, portable computers) (claim **7**) [0020]. A gyroscopic sensor is an example of an appropriate sensor for sensor (16) (claim **6**). The sensor (16) may include a single sensor or a plurality of sensors [0020]. The sensors (16) can be positioned on the viewer (36) of Fig. 8 (claim **5**) and/or on the display device (12) to sense the orientation of the viewer and/or display device (claim **16**: ***means for determining user desire orientation for rendering objects***) [0027]. The display image (14) is oriented with respect to the orientation of the display (12). As the display device (12) oriented as shown in Fig. 1 is rotated, the display image (14) is automatically oriented, such that the appearance of the display image (14) appears to remain approximately stable regardless of the orientation of the display device (12) (claim **1**: ***automatically orients display based on user perspective***) [0025].

In regards to claim **2** –

The device of Manchester further allows the relative orientation between the display image (14) of Fig. 3 and viewer (36) of Fig. 8 to be approximately constant. Thus, if a viewer tilts her head, the display image (14) is tilted in the same direction (claim **2**: desired orientation), such that the orientation between the viewer and the displayed image (14) is approximately constant (fixed) (claim **2**: ***based on user context or state***) [0026].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims **3**, **4**, **8-12**, and **15**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Manchester (2004/0201595 A1) in view of Browning (6,707,581 B1).

Manchester teaches the limitation of claims **3**, **4**, **8-12**, and **15** with the exception of disclosing bar code scanner and product information. However, Browning discloses a handheld device that scans a line of information, such as bar codes. Retrieval software is included to obtain the information associated with the scanned image.

Manchester discloses a self-orienting display that senses the characteristics of an object and automatically rotates and reformats a display image in accordance with those characteristics [0019]. Fig. 1 is an illustration of a self-orienting display (100) comprising a display device (12), a display image (14), a sensor (16), and optional control buttons (18). The self-orienting display (12) may be in the form of any appropriate display device capable of providing the display image (14), such as hand held devices (claim **15**: ***a mobile device***) [0020]. The sensor (16) may include a single sensor or a plurality of sensors [0020]. The sensors (16) can be positioned on the viewer (36) of Fig. 8 and/or on the display device (12) to sense the orientation of the viewer and/or display device [0027]. The display image (14) is oriented with respect to the orientation of the display (12). As the display device (12) oriented as shown in Fig.

1 is rotated, the display image (14) is automatically oriented, such that the appearance of the display image (14) appears to remain approximately stable regardless of the orientation of the display device (12) (claim **15**: ***automatically orients display based on user perspective***) [0025]. The display image (14) may be in the form of a graphic display image, a textual display image, a video display image, and a functional control button (18), or a combination therefor. The display image (14) may comprise display image portions, such as display image portions (14a) and (14b). As depicted in Fig. 1, a graphic/video display type is provided by the display image portion (14a) and a text display type is provided by the display image portion (14b) [0022]. Manchester includes an authentication component by analyzing the sensed image, which is sensed by the camera (16b) [0036]. The sensed image maybe analyzed for key features [0036].

The invention of Browning comprises a handheld scanner and information retrieval software. The software can retrieve information from a remote source or can be entirely incorporated within the handheld scanner [col. 2, lines 38-49]. As shown in Fig. 1, the scanner is incorporated within a personal digital assistant (PDA) (10). The scan is performed by sweeping the scan head (16) (claim **8**, claim **15**: ***capturing an image***) of the handheld scanner (10) across printed media containing information of interest, such as a barcode product identifier on a label (claim **4**) [col. 2, lines 50-57]. The handheld scanner (10) provides a LED/LCD display (22) for displaying the graphical objects. Referring to Fig. 3, the scan head (16), decoder, and other integrated circuits are controlled by means of a microprocessor that is programmed with instructions to carry out the method of Browning (claim **9**) [col. 3, lines 48-51]. The electrical signals

generated by the CCD in the scan head (16) are stored in a RAM (18) as a complete image [col. 3, lines 7-9] for subsequent presentation to a companion information-retrieval agent [col. 3, lines 31-33]. The handheld scanner can work in conjunction with a separate communications device to provide access to a remote source and retrieve information that is identified by the scan image (claim **10**) [col. 4, lines 3-7]. Information can also be directly stored in the handheld scanner, in which case remote communications capabilities are not required [col. 4, lines 21-23]. In a playback mode, the retrieved information is displayed to the user immediately upon receipt (claim **11**, **12**) [col. 5, lines 31-32]. This information would contain product information and location associated with the barcode (i.e. image) obtained by the information-retrieval agent either from a remote source, such as a personal computer or within the handheld scanner itself. In a storage mode, the retrieved information is stored for later viewing by the user at a time that may be more convenient (claim **3**) [col. 5, lines 33-34].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a barcode scanner as the camera within the authentication component of Manchester because the barcode scanner would provide a means to sense an object (such as a barcode) resulting in displaying the object within display portion (14a) of Fig. 1 of Manchester associated with the barcode and providing information associated with the barcode of that obtained image within the display portion (14b) of Fig. 1 of Manchester associated with the barcode.

Claims **13** and **14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Browning (6,707,581 B1) in view of Manchester (2004/0201595 A1).

Browning teaches the limitations of claims **13**, **14** with the exception of disclosing automatically orienting the rendered graphic objects. However, Manchester discloses a self-orienting display that senses the characteristics of an object and automatically rotates and reformats a display image in accordance with those characteristics.

The invention of Browning comprises a handheld scanner and information retrieval software. The software can retrieve information from a remote source or can be entirely incorporated within the handheld scanner [col. 2, lines 38-49]. As shown in Fig. 1, the scanner is incorporated within a personal digital assistant (PDA) (10). The scan is performed by sweeping the scan head (16) of the handheld scanner (10) across printed media containing information of interest, such as a barcode product identifier on a label (claim **13**: ***portable bar code scanning device***) [col. 2, lines 50-57]. The handheld scanner (10) provides a LED/LCD display (22) for displaying the graphical objects (claim **13**: ***display***).

Manchester discloses a self-orienting display that senses the characteristics of an object and automatically rotates and reformats a display image in accordance with those characteristics [0019]. Fig. 1 is an illustration of a self-orienting display (100) comprising a display device (12), a display image (14) (claims **13**: ***displaying graphical objects***), a sensor (16), and optional control buttons (18). The self-orienting display (12) may be in the form of any appropriate display device capable of providing the display image (14), such as hand held devices [0020]. The sensors (16) can be positioned on the viewer (36) of Fig. 8 and/or on the display device (12) to sense the orientation of the viewer and/or display device (claim **14**: ***means for determining user***

desire orientation for display objects) [0027]. The display image (14) is oriented with respect to the orientation of the display (12). As the display device (12) oriented as shown in Fig. 1 is rotated, the display image (14) is automatically oriented, such that the appearance of the display image (14) appears to remain approximately stable regardless of the orientation of the display device (12) (claim **13**: ***changing object display parameters to provide at least one of an optimized object display and an optimized viewing position***; claim **14**: ***automatically orients display based on user perspective***) [0025].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the sensors and self-orientation circuitry of Manchester within the display and microprocessor of Browning's handheld scanner to automatically orient the graphical image on the display of Browning because there would be times when the user will scan a barcode located on an object where the handheld scanner would need to be oriented in a manner that is not in alignment with the user's view, causing the graphical object on the display on the handheld scanner to be skewed from the user's viewing. Thus, the user would have to angel their head to view the graphical object on the display when the barcode is being scanned. Therefore, it would have been obvious to include the self-orienting display to prevent the skewing of the user's head to view the graphical object on the display of the handheld scanner.

Claim **17** is rejected under 35 U.S.C. 103(a) as being unpatentable over in view Ogawa (6,937,281 B1) in view of Manchester (2004/0201595 A1).

Ogawa teaches the limitations of claim **17** with the exception of disclosing an artificial intelligence component that determines an optimal screen orientation for the display based on the user's position. However, Manchester discloses a self-orienting display that senses the characteristics of an object and automatically rotates and reformats a display image in accordance with those characteristics.

Ogawa teaches an electronic image pickup apparatus (***digital camera***) for picking up an image by using an image sensor (14) as shown in Fig. 1 (claim **17**: data capture component that captures data) [col. 2, lines 50-60]. An image display part (28) is included in the image pickup apparatus (claim **17**: ***display***) [col. 3, lines 27-54]. The operation means (68) is a single-shooting/continuous-shooting switch. When the shutter switch (64) is depressed, a single frame, or a continuous shooting mode is set. The continuous shooting mode is in which a plurality of frames are successively exposed for a period of time during which the shutter switch (64) continues being depressed [col. 5, lines 42-48]. Furthermore, the operation means (70) is an operation part, which is composed of various buttons, including a single-shooting/continuous-shooting self-timer changeover button [col. 5, lines 50-55]. Thus, the user can set the image pickup apparatus of Ogawa for self-timing for continuous shooting (claim **17**: ***continuous and hands-free capture of data***). Furthermore, the image pickup apparatus can be set on a table when set with the self-timer for continuous shooting so that the user can be in the picture.

Manchester discloses a self-orienting display that senses the characteristics of an object and automatically rotates and reformats a display image in accordance with

those characteristics [0019]. Fig. 1 is an illustration of a self-orienting display (100) comprising a display device (12), a display image (14), a sensor (16) (claim **17**: ***artificial intelligence component***), and optional control buttons (18). The self-orienting display (12) may be in the form of any appropriate display device capable of providing the display image (14), such as hand held devices [0020]. The sensor (16) may include a single sensor or a plurality of sensors [0020]. The display image (14) is oriented with respect to the orientation of the display (12). As the display device (12) oriented as shown in Fig. 1 is rotated, the display image (14) is automatically oriented, such that the appearance of the display image (14) appears to remain approximately stable regardless of the orientation of the display device (12) (claim **17**: ***automatically orients display based on user perspective***) [0025].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the self-orienting display of Manchester of the image display portion (i.e. screen) of image display means of Ogawa because there would be times when the user would like to capture an images that is not directly in front of the user, and would thus need to position the camera in a manner that is not in alignment with the user's view, causing the graphical object on the display on the camera to be skewed from the user's viewing. Thus, the user would have to angle their head to view the graphical object on the display when the image is being taken. Therefore, it would have been obvious to include the self-orienting display to prevent the skewing of the user's head to view the graphical object on the display of the digital camera.

(10) Response to Argument

In response to the arguments presented in Appellant's appeal brief filed 21 February 2006, hereinafter termed 'Arguments', the following rebuttals are heretofore provided below.

A) Examiner respectfully disagrees with pgs. 3-7 of Arguments where Appellant states Manchester does not teach nor suggest ***a display component*** that cooperates with ***an orientation component*** that automatically orients display objects rendered by the display ***based at least in part upon a user perspective***. The device of Manchester (as shown in Fig. 1) comprises a display device (12), a display image (14), and a sensor (16) where the sensors sense the orientation of the viewer and/or display device (12) [0020, 0027]. Additionally, the self-orienting display (12) may be in the form of any appropriate display device capable of providing the display image (14), such as a hand held device [0020]. The display image (14) is automatically oriented with respect to the orientation of the display (12) [0025]. Therefore, since the device may take the form of a hand held device, the display image is oriented with respect to the orientation of the display device i.e., orientation in regards to the manner in which the user is holding the display device. It is implicit that the display image orients itself based on the user's perspective since the user holds the display toward him/herself in order to view. Additionally, Appellant's independent claims do not limit the scope of the claims as to the degree of rotation of the orientation Appellant's invention. Rather the independent claims

merely state *orients display object ... based at least in part upon a user perspective*. Therefore, the display of Manchester orients its display image based on the orientation of the display device where the display device is held by the user and thusly, is automatically oriented based on the user's perspective.

B) Examiner respectfully disagrees with pgs. 7-8 of Arguments where Appellant states Manchester in view of Browning does not teach nor suggest ***a display component*** that cooperates with ***an orientation component*** that automatically orients display objects rendered by the display ***based at least in part upon a user perspective*** and furthermore fails to teach ***means to sense an object***. The above arguments in section A) is applied herein concerning orientation based on the user's perspective. Furthermore, the invention of Manchester includes an authentication component by analyzing the sensed image, which is sensed by the camera (16b) [Manchester: [0036]]. In view of Manchester, the invention of Browning (as shown in Fig. 1) incorporates a scanner within a personal digital assistant (PDA) (10) where the scan is performed by sweeping the scan head (16) of the handheld scanner (10, PDA) across printed media containing information of interest, such as a barcode product identifier on a label [Browning: col. 2, lines 50-57]. The scan head of Browning provides a ***means to sense an object*** where the ***object*** is the barcode product identifier on a label. Furthermore, the information associated with the barcode product

identifier is retrieved via the information-retrieval agent of Browning [Browning: col. 3, lines 7-9].

C) Examiner respectfully disagrees with pgs. 8-9 of Arguments where Appellant states Browning in view of Manchester does not teach nor suggest ***a display component*** that cooperates with ***an orientation component*** that automatically orients display objects rendered by the display ***based at least in part upon a user perspective***. The above arguments in section A) is applied herein concerning orientation based on the user's perspective.

D) Examiner respectfully disagrees with pgs. 8-9 of Arguments where Appellant states Ogawa in view of Manchester does not teach nor suggests a ***holder*** that holds the data capture component at a predetermined position ***to allow for continuous and hands-free capture of data***. In regards to Ogawa, the image pickup apparatus can be set to a continuous shooting mode set where a plurality of frames are successively exposed during a period of time [col. 5, lines 42-48]. Additionally, the user can set the image pickup apparatus of Ogawa for self-timing [col. 5, lines 50-55] and thus set the apparatus for self-timing for continuous shooting. This allows for a ***continuous capture of data***. Furthermore, it is not unreasonable to set the image pickup apparatus on a table or tripod when opting to set the apparatus for self-timing. In most instances such devices are set on a table or tripod to allow the user/operator to be in the picture also. This allows for a ***hands-free capture of data***. Therefore, by setting the apparatus of Ogawa to self-timing for continuous

shooting, and placing the apparatus on a table or tripod, this allows for ***continuous and hands-free capture of data***.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully Submitted,

Michelle K. Lay

27 March 2006 Michelle K Lay.

Kee M. Tung
Primary Examiner

Conferees

Kee M. Tung

Ulka Chauhan